

OPTIONAL DRAIN WIRE (SEE NOTE 3)

RELEASE PAPER (MFG. OPTION)

BRAID

FILM FOIL

CONDUCTORS

CABLE: TWISTED PAIRS

.026 [0.66] MIN. THICKNESS PVC JACKET

Ø DIM. "A"

PVC JACKET

RELEASE PAPER (MFG. OPTION)

BRAID

FILM FOIL

CABLE: TWISTED PAIRS

This technical drawing illustrates the construction of a cable assembly in two views: a cross-section and a side view. The cross-section on the left shows a central core of twisted pairs (labeled 'CABLE: TWISTED PAIRS') surrounded by a layer of conductors, a film foil, a braid, and a release paper (labeled 'RELEASE PAPER (MFG. OPTION)'). An optional drain wire is also shown at the top. The entire assembly is encased in a PVC jacket with a minimum thickness of .026 [0.66]. The side view on the right shows the cable's profile, including the PVC jacket, release paper, braid, and film foil, with a dimension line indicating the diameter as 'Ø DIM. "A"'. The cable ends on the right are labeled 'CABLE: TWISTED PAIRS'.

3600X/XX XX DW

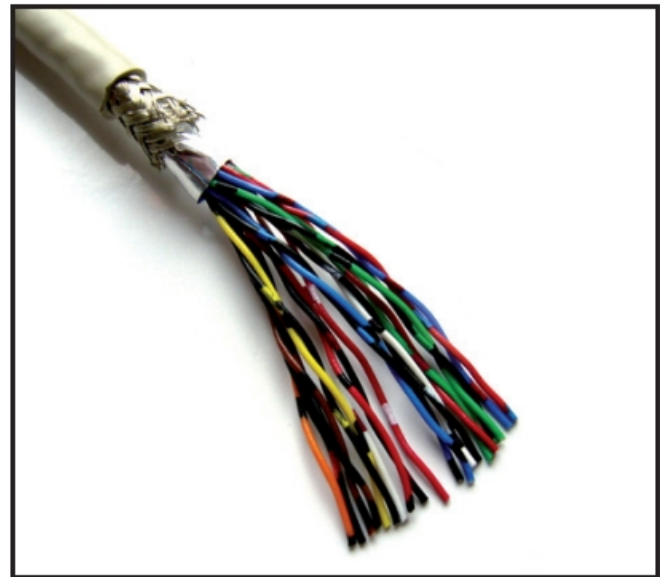
NUMBER OF CONDUCTORS
(SEE TABLE 1)

DESCRIBE WIRE DETAIL

PAIR	COND	1st CONDUCTOR		COND	2nd CONDUCTOR			PAIR	COND	1st CONDUCTOR		COND	2nd CONDUCTOR	
		SOLID	BAND		SOLID	BAND				SOLID	BAND		SOLID	BAND
1	1	BLACK	RED	2	RED	BLACK		26	51	BROWN	YELLOW	52	YELLOW	BROWN
2	3	BLACK	WHITE	4	WHITE	BLACK		27	53	BROWN	ORANGE	54	ORANGE	BROWN
3	5	BLACK	GREEN	6	GREEN	BLACK		28	55	ORANGE	YELLOW	56	YELLOW	ORANGE
4	7	BLACK	BLUE	8	BLUE	BLACK		29	57	VIOLET	ORANGE	58	ORANGE	VIOLET
5	9	BLACK	YELLOW	10	YELLOW	BLACK		30	59	VIOLET	RED	60	RED	VIOLET
6	11	BLACK	BROWN	12	BROWN	BLACK		31	61	VIOLET	WHITE	62	WHITE	VIOLET
7	13	BLACK	ORANGE	14	ORANGE	BLACK		32	63	VIOLET	GREEN	64	GREEN	VIOLET
8	15	RED	WHITE	16	WHITE	RED		33	65	VIOLET	BLUE	66	BLUE	VIOLET
9	17	RED	GREEN	18	GREEN	RED		34	67	VIOLET	YELLOW	68	YELLOW	VIOLET
10	19	RED	BLUE	20	BLUE	RED		35	69	VIOLET	BROWN	70	BROWN	VIOLET
11	21	RED	YELLOW	22	YELLOW	RED		36	71	VIOLET	BLACK	72	BLACK	VIOLET
12	23	RED	BROWN	24	BROWN	RED		37	73	GRAY	WHITE	74	WHITE	GRAY
13	25	RED	ORANGE	26	ORANGE	RED		38	75	GRAY	BROWN	76	BROWN	GRAY
14	27	GREEN	WHITE	28	WHITE	GREEN		39	77	GRAY	RED	78	RED	GRAY
15	29	GREEN	BLUE	30	BLUE	GREEN		40	79	GRAY	ORANGE	80	ORANGE	GRAY
16	31	GREEN	YELLOW	32	YELLOW	GREEN		41	81	GRAY	YELLOW	82	YELLOW	GRAY
17	33	GREEN	BROWN	34	BROWN	GREEN		42	83	GRAY	GREEN	84	GREEN	GRAY
18	35	GREEN	ORANGE	36	ORANGE	GREEN		43	85	GRAY	BLUE	86	BLUE	GRAY
19	37	WHITE	BLUE	38	BLUE	WHITE		44	87	TAN	ORANGE	88	ORANGE	TAN
20	39	WHITE	YELLOW	40	YELLOW	WHITE		45	89	TAN	GREEN	90	GREEN	TAN
21	41	WHITE	BROWN	42	BROWN	WHITE		46	91	TAN	BLACK	92	BLACK	TAN
22	43	WHITE	ORANGE	44	ORANGE	WHITE		47	93	TAN	BLUE	94	BLUE	TAN
23	45	BLUE	YELLOW	46	YELLOW	BLUE		48	95	TAN	WHITE	96	WHITE	TAN
24	47	BLUE	BROWN	48	BROWN	BLUE		49	97	TAN	YELLOW	98	YELLOW	TAN
25	49	BLUE	ORANGE	50	ORANGE	BLUE		50	99	TAN	BROWN	100	BROWN	TAN

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1.	REGULATORY INFORMATION: VISIT 3M.com/regs
2	IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
3	OPTIONAL DRAIN WIRE, SPECIAL ORDER: 28 AWG, 7 X 36 AWG (7 X Ø0.127) TPC.



MARKING: SEE "PRINTING ILLUSTRATION" BELOW
STANDARD: 28 AWG, 7 X 36 AWG (7 X Ø0.127) TINNED
CONDUCTORS: STRANDED COPPER
SHIELDING: 0.001 [0.03] THICK ALUMINUM/POLYESTER FILM FOIL
AND 90% COVERAGE TINNED COPPER BRAID

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	58Ω	91Ω
CAPACITANCE:	29.2 pF/ft [95.8 pF/m]	18.5 pF/ft [60.7 pF/m]
INDUCTANCE:	0.10 μH/ft [0.33 μH/m]	0.15 μH/ft [0.49 μH/m]
PROPAGATION DELAY:	1.69 ns/ft [5.54 ns/m]	1.69 ns/ft [5.54 ns/m]
VELOCITY OF PROPAGATION:	60%	60%

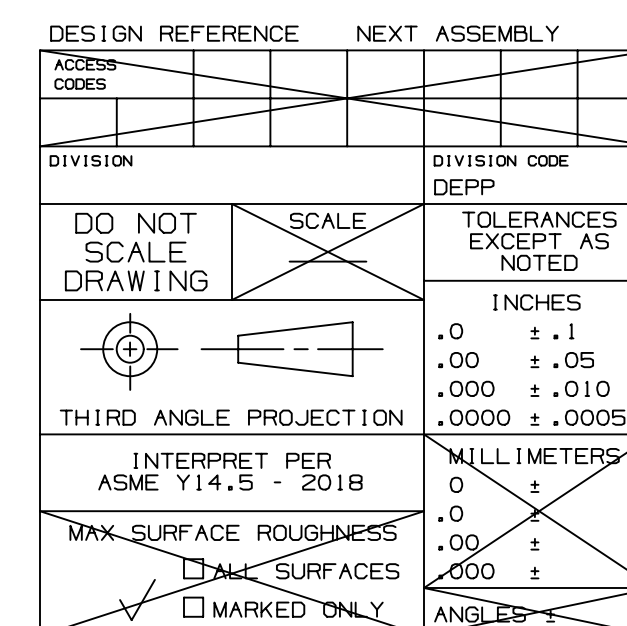
NOTE: UNBALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR WITH ONE CONDUCTOR CONNECTED TO THE SHIELD.
BALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR WITH THE SHIELD FLOATING.

FLAMMABILITY RATING: USA: N.E.C. 725, CL2
CANADA: FT1

UL[®] CL2 75°C 28 AWG 3M NU **UL**[®] AWM II A/B 80°C 150V FT1 EU <50V

TABLE 1		
NUMBER OF CONDUCTORS	3M PART NUMBER	DIM. "A" $\pm .02$
14 (7) PAIR	3600X/14	.22 [5.6]
20 (10) PAIR	3600X/20	.24 [6.1]
24 (12) PAIR	3600X/24	.25 [6.4]
26 (13) PAIR	3600X/26	.25 [6.4]
36 (18) PAIR	3600X/36	.29 [7.4]
40 (20) PAIR	3600X/40	.30 [7.6]
50 (25) PAIR	3600X/50	.32 [8.1]
68 (34) PAIR	3600X/68	.36 [9.1]
80 (40) PAIR	3600X/80	.39 [9.9]
100 (50) PAIR	3600X/100	.44 [11.2]

DIMENSIONS: INCHES [MM]
[MM] IS FOR REF. ONLY



REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
DRFT CASTIGLIONE		DATE MAY 07, 2024	MPS	DATE	
CHKD	DATE		APPLV F. RODRIGUEZ	DATE MAY 07, 2024	
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TITLE					
SHIELDED/JACKETED, ROUND, DISC WIRE CABLE, 28AWG					
CAGE NUMBER	SIZE	DRAWING NO.			REV.
D		78-5100-0388-8			D
MODEL	3600X		DET.	YES NO	
				SHT 1 OF 2	

8

7

6

5

4

3

2

1

3M™ ROUND, SHIELDED/JACKETED, DISCRETE WIRE CABLE, 3600X SERIES

28 AWG STRANDED, TWISTED PAIR, PVC/PVC

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DESIGN REFERENCE

NEXT ASSEMBLY

DO NOT SCALE DRAWING

SCALE

TOLERANCES EXCEPT AS NOTED

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX. SURFACE ROUGHNESS

ALL SURFACES

MARKED ONLY

INCHES

MILLIMETERS

ANGLES

REV

ECO

ISSUE DATE AND DESCRIPTION

DRFT

CHKD

DRFT

CASTIGLIONE

DATE

MAY 07, 2024

DATE

MAY 07, 2024

APPR

F. RODRIGUEZ

DATE

MAY 07, 2024

3M

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St. Paul,
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TITLE

SHIELDED/JACKETED,
ROUND, DISC. WIRE
CABLE, 28AWG

CAGE NUMBER

SIZE

DRAWING NO.

REV.

MODEL

3600X

DET

LISTS

YES

NO

SHT 2 OF 2

D

C

B

A

D

C

B

A

78-5100-0388-B

Revision